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ICI WATER AND ELECTRIC COMPANY

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AZ. CORP COMMISSION
DOCUMENT CONTROL

DOCKET NO. E-00000D-03-0047

March 17, 2003

Arizona Corporation Commission
Utilities Division
1200 West Washington
Phoenix, AZ 85007-2992
Attn: Docket Control


Re: Morenci Water and Electric Company-10 Year Plan

Dear Sirs:

Please find enclosed the 10 Year Plan for 2003 through 2012 as required by the Arizona Revised Statutes, Section 40-360.02, governing power plant and transmission line siting.

Please let me know if you have any questions or comments.

Sincerely,


D. L. True
Superintendent

DLT/dt


Enclosure

Xc: Choi Lee, Phoenix Office w/encl. Via email
Tim Summers, Phoenix Office w/encl. Via email
Robert Reed, w/encl. Via email
Peter Quinn w/encl. Via email
Lex Zerwas w/encl. Via email
Terry Reader w.encl. via email
Brian Musser w/encl. Via email
File: tenyr032003.doc

Arizona Corporation Commission

DOCKETED

MAR 18 2003

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MORENCI WATER AND ELECTRIC COMPANY

TEN-YEAR PLAN

2003-2012

Issued 3/17/2003

**Prepared for the Arizona Corporation Commission and the Power Plant and
Transmission Line Siting Committee**

Filed on _____

INTRODUCTION

This report is submitted by The Morenci Water and Electric Company (MW&E) as required by the Arizona Revised Statutes, Section 40-360.02, governing power plant and transmission line siting.

Part I is a description of MW&E's planned construction of:

- * Expansion work to TEP's existing Greenlee 345 kV Switching Station to provide for a line terminal for a MW&E interconnection.
- * 345 kV transmission line from the TEP Greenlee Substation to a new substation (Copper Verde Substation) south east of the Morenci townsite.
- * A new Copper Verde Substation 345/230/24.9 kV, 400 MVA southeast of the Morenci townsite on Phelps Dodge property.
- * A new 230 kV transmission line from the SWTC Hackberry Substation to a new substation (unnamed) located on the south side of the Phelps Dodge owned Safford mine.
- * A new substation 230/46 kV, 100 MVA on the south end of Phelps Dodge property near the Safford mine. (Sketch not included pending future design)

Attached are detailed descriptions of the projects described herein. Sketches are enclosed following the detailed descriptions.

PART I - PLANNED CONSTRUCTION

A. TRANSMISSION FACILITIES

Name	MW&E Transmission Line
Location a) Point of Origin b) Point of Termination	Tucson Electric Power Greenlee Substation Copper Verde Substation (new)
Size a) Operating Voltage b) Capacity c) Length	345 kV 200 MVA (limited by 200 MVA transformer capacity at the Copper Verde Substation. Conductor thermal limit approx. 1100 MVA) 11 miles in length (approximately)
Corridor	North from the TEP Greenlee Substation for approximately 2 miles, cross over the SWTC 230 kV transmission. Parallel with the SWTC 230 kV transmission line from the AEPCO-Greenlee Substation past the AEPCO-Morenci Substation to the new Copper Verde Substation southeast of the Morenci townsite.
Purpose	Meet WECC compliance for single contingency outages and maintenance of service to customers during system outages, minimize the requirement to load shed to maintain system integrity and voltage levels during system disturbances and outages, provide supplemental access to the western United States' interconnected transmission grid
Date a) Begin construction b) In Service	09/01/2003 01/01/2004

PART I - PLANNED CONSTRUCTION (Continued)

A. TRANSMISSION FACILITIES (Continued)

Name	MW&E Transmission Line
Location a) Point of Origin b) Point of Termination	SWTC Hackberry Substation PD Safford (new)
Size a) Operating Voltage b) Capacity c) Length	230 kV 100 MVA (limited by 100 MVA transformer capacity at the PD-Safford Substation. Conductor thermal limit approx. 400 MVA) 4 miles in length (approximately)
Corridor	West from the SWTC Hackberry Substation for approximately 2 miles, northwest for approximately $\frac{3}{4}$ of a mile and turning north for approximately one mile to the PD-Safford site. .
Purpose	Provide power to the Phelps Dodge Safford mining operations.
Date a) Begin construction b) In Service	2005 2005

PART I - PLANNED CONSTRUCTION (Continued)

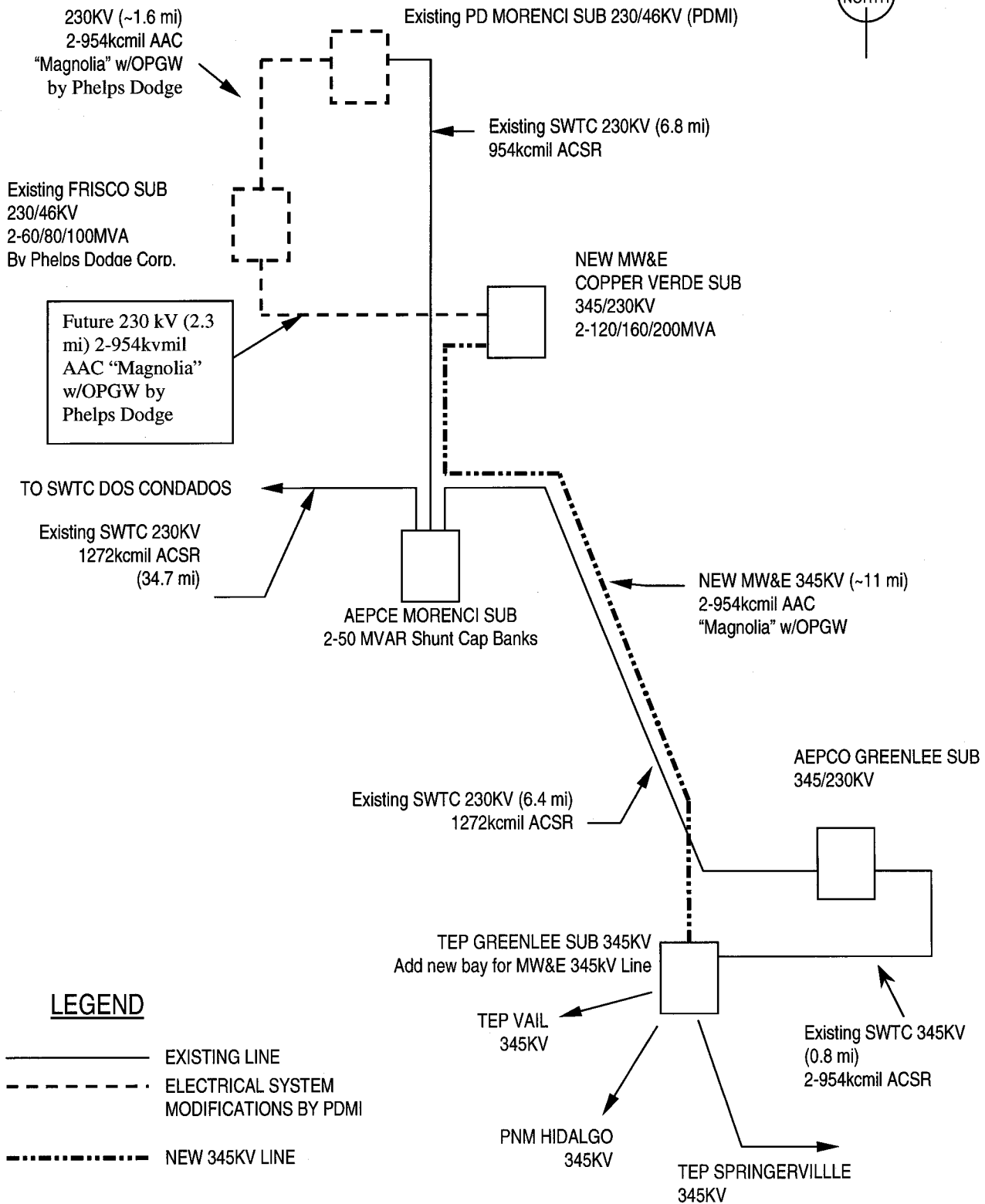
B. SUBSTATION FACILITIES

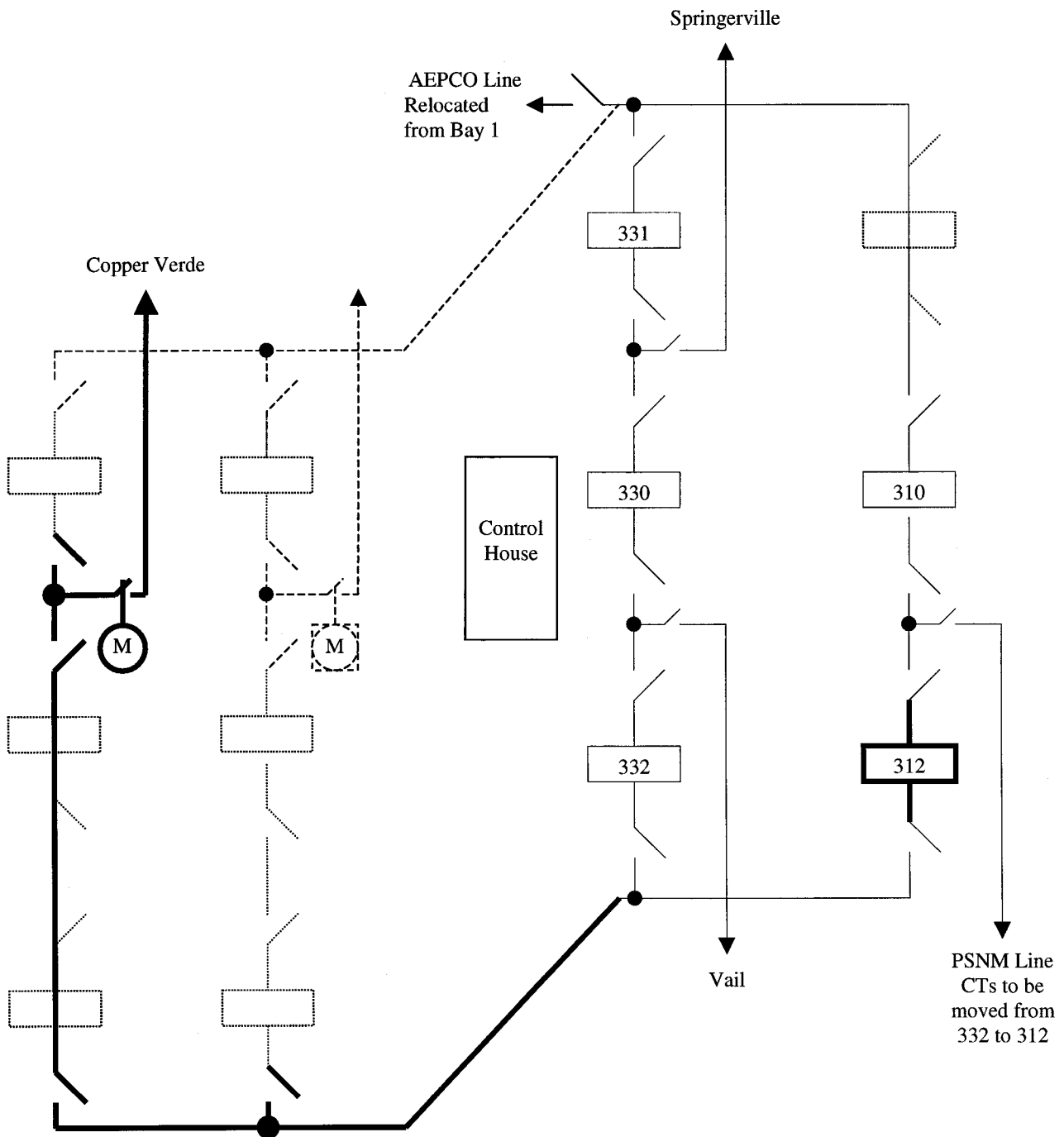
Name	Copper Verde Substation
Location	Southeast of Morenci Townsite
Size	400 feet X 800 feet
Capacity	400 MVA
Equipment	345kV transmission line terminating structure 1-345 kV Power Circuit Breakers and associated Switches, Bus, Fittings, Relay Metering and Communication Equipment. 1-345/230/24.9 kV, 120/160/200 MVA Auto transformer 2-230 kV Power Circuit Breakers and associated switches, bus, fittings, relay and metering equipment Control Building with associated relay and control panels.
Operating Voltages	345 kV, 230 kV, 25 kV
Transmission Source	MW&E 345 kV Line
Purpose	Convert 345 kV transmission to 230kV/25 kV distribution
Date	
a) Begin construction	09/01/2003
b) In Service	01/01/2004

Name	Tucson Electric Power Greenlee Substation
Location	South of State Highway 78 and 3.3 mile east of SR 78 and SR 191 intersection
Size (expansion area)	210 feet X 630 feet
Capacity	No transformation (switch yard)
Equipment	345kV transmission line terminating structure 1-345 kV Power Circuit Breakers and associated Switches, Bus, Fittings, Relay Metering and Communication Equipment.
Operating Voltages	345 kV
Transmission Source	TEP 345 kV Lines
Purpose	Source of 345kV energy
Date	
a) Begin construction	09/01/2003
b) In Service	01/01/2004

PART I - PLANNED CONSTRUCTION (Continued)**B. SUBSTATION FACILITIES (Continued)**

Name	PD-Safford Substation (Name to change)
Location	South of Phelps Dodge Safford mine
Size	400 feet X 400 feet
Capacity	100 MVA
Equipment	230 kV transmission line terminating structure 2-230 kV Power Circuit Breakers and associated Switches, Bus, Fittings, Relay Metering and Communication Equipment. 2-230/46 kV, 30/40/50/55 MVA Auto transformers 2-46 kV Power Circuit Breakers and associated switches, bus, fittings, relay and metering equipment Control Building with associated relay and control panels.
Operating Voltages	230 kV, 46 kV
Transmission Source	MW&E 230 kV Line
Purpose	Convert 230 kV transmission to 46 kV distribution
Date	
a) Begin construction	2005
b) In Service	2005





LEGEND

- Existing
- Future
- Proposed Construction



DATE: 6/30/99

BY: SDS

Greenlee Substation Proposed Expansion

DRAWING NO.

GRN-1

